

Flies, Bees and Butterflies on
La Palma, Canary Islands in 1976
By PETER J. CHANDLER *

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Returning via Los Llanos I diverged onto the El Paso road and crossed the plateau towards the Cumbre Nueva range above Santa Cruz; the road from El Paso to Breña Alta, which passes by a long tunnel through the Cumbre Nueva is the best on the island, having been recently constructed to shorten the journey between Santa Cruz and Los Llanos. While crossing the plateau, the slopes of the Cumbre Nueva appear well forested but this is deceptive because most trees had been felled leaving the fayal-brezo community of the type which covers much formerly forested ground in Tenerife. I stopped below this hillside shortly before reaching the tunnel and investigated some dry ravines in an area of partly cultivated lower slopes grading into steep pine forest. Bees were numerous on flowers here and included *Anthophora a. alluaudi* Pérez and *Lasioglossum chalcodes* (Brullé) in addition to the commoner *Lasioglossum* spp. *Tachina canariensis* and *Scaeva albomaculata* (Macq.) were also visiting them. The few butterflies, the large fritillary *Pandoriana pandora* (Denis & Schiffermüller) and a bright orange form of *Lycaena phlaeas* (L.), were new sightings.

On the next day, I returned by the same route and sampled two sites on the eastern slopes of the Cumbre Nueva above Breña Alta, where there are extensive plantations of chestnut (*Castanea sativa* L.). These sheltered many of the shade loving species also found in the laurisilva, including several tipulids, mycetophilids, *Hylemya latevittata* and the rather local syrphid *Heringia adpropinquans* (Beck.) which I had previously found at Las Mercedes and Agua Garcia in Tenerife. In open places, *Oedosphenella canariensis* and *Thereva occulta* occurred and the same selection of bees were found at flowers as on the west side of this range.

Upon regaining the plateau, I took the side road which winds up the slopes of La Caldera de Taburiente to the viewpoint of La Cumbrecita. The road soon entered mature pine forest, which is relatively open with plenty of the shrub *Cistus symphytifolius* Lam. with large pink flowers, which attracted *E. tenax* and the bees *A. a. alluaudi* and *Eucera algira* Lep. *V. i. vulcania*, *P. rapae* and *C. croceus* were flying. Several of the large bombyliid *Villa nigriceps* (Macq.) were settling on bare stony ground, while an *Epitriptus* species (Asilidae) was frequent on boulders. Other insects included *Scaeva albomaculata*, *Cyrtosia canariensis* and the pompilid wasp *Arachnospila carbonaria* Scop. *Suillia setitarsis* Cz., very similar to *S. oceana* but with bare mesopleura, was taken here; it appeared to be more associated with pine forest than *oceana*, which is common in the laurisilva. On ascending to La Cumbrecita, a

* Weston Research Laboratories, 644 Bath Road, Taplow, Maidenhead, Berks SL6 0PA.

good view was initially obtained of the extensively pine clad slopes of the crater but mist soon descended and slight precipitation began; the only insect seen at this altitude (1,833 metres) was *B. t. canariensis* at the *Cistus* flowers. A short stop was made on the descent where sweeping heather produced a few mycetophilids and *Cyrtosia*; *Scathophaga stercoraria* (L.) occurred in an open grassy area.

On 30th May I once again ascended to the plateau, quickly passing Los Llanos and El Time to the road north to Puntagorda, reaching the end of the surfaced road by 11.45 a.m. Most of this route was through cultivated areas but partly pine clad hills were usually in view. In fields near the junction of the Las Tricias and Garafia roads, few insects were about other than the syrphids *M. auricollis* and *M. corollae* and various small acalypterates. I soon returned via Puntagorda and stopped near the beginning of the mountain track to Montaña del Arco. A dry ravine with a wide variety of flowers produced *L. v. unicolor*, *B. t. canariensis*, *Tachina canariensis* and *Chrysotoxum triarcuatum*. *M. j. hispulla* was abundant; *C. croceus*, *P. rapae* and *C. webbianus* were also on the wing. Scattered pines were present nearby but here they had upright branches rather than the spreading crowns at higher altitudes and a dense ground cover of *Cistus* proliferated beneath them. Shaded spots produced *Suillia setitarsis* and *Euthycera guanchica* Frey (the less frequent of the two Canarian Sciomyzidae) among other smaller Diptera.

A few brief stops were made on the plateau while returning towards the Cumbre Nueva; here the landscape was open, with grassy fields and some bare areas covered with volcanic ash. Along one gulley, *Oedosphenella* and *Pherbellia* were swept; *Lycaena phlaeas* was noted at the purple flowered *Senecio papyraceus* DC. The Western slopes of the Cumbre Nueva were again sampled as the sun was now shining and on this occasion the cleared forest area dominated by "fava" and tree heather with occasional pines was investigated. Clearings with much *Senecio papyraceus* produced *L. phlaeas* and *P. pandora* again; *Metasyrphus corollae*, *Melecta curvispina* Lieftinck, and a red-tailed *Sphecodes* bee were also visiting the flowers. Further along the forest road *C. croceus* was flying and the only example of *Issoria lathonia* (L.) seen during the visit was observed. *Villa nigriceps* was again settling on the ground. *Suillia oceana*, *Pherbellia argyrotarsis* and *Oedosphenella* occurred and the shade of a large *Myrica* produced several mycetophilids.

On 31st May I returned to the area south of Santa Cruz as collecting was confined to the very overcast afternoon. Four localities were briefly sampled but none were very productive. *Cyrtosia* and *Geron* were swept in numbers from rough grassland near Tiguerorte. *Geron* was also abundant in sparse scrub on volcanic ash below Hoyo de Mazo and the few other insects included the syrphids *Eumerus latitarsis* and *Paragus tibialis* (Fall.) form *meridionalis* Beck.: the tephritid *Oxyaciura tibialis* (R.-D.) was also caught. On the rocky shore at Punta

de las Palomas only the tephritid *Myopites nigrescens* Beck. could be found when rain was beginning; this had already been taken at several scrubby localities inland.

The weather improved for the last two days and although a single area was visited on each day, a large variety of species was obtained. On 1st June, the course of the Barranco de las Nieves, which reaches the coast at Santa Cruz, was followed from the Las Nieves road until it becomes a narrow gorge. The upper reaches are flanked by forested cliffs but there is no closed canopy woodland. Sweeping rock overhangs on the more open lower reaches, where the valley is cultivated, produced a female *Sylvicola* and very many of the aberrant psychodid *Nemopalpus flavus* Macq. (resembling a tipulid of the genus *Molophilus*), while the damper rock faces at a higher level produced instead a small *Psychoda* and mycetophilids were found sparsely. The acalypterates included *Euleia separata*, *Suillia oceana* and *Drosophila pallida*. *Melanostoma incompletum* was numerous and *Helina obscurisquama* was frequent.

The sky was at first overcast but bright spells followed; the cloud cleared by 3.30 p.m. and the hot sunshine brought out the butterflies, bees and wasps. *M. j. hispulla*, *P. rapae* and *C. croceus* were abundant; *C. webbianus*, *V. i. vulcania*, *T. christi*, *P. xiphiooides* and *Pieris cheiranthi* were also noted. A *Chrysis* of the *ignita* group was running rapidly over a wall and the active sand wasp *Podalonia tydei* (Le Guillou) was settling on bare ground; *Prosopis pictipes atra* Saunders and an *Osmia* (probably *submicans* Morawitz) were at flowers. A small yellow umbel attracted the wasp *Ancistrocerus fortunatus* Bl. and a black evaniid; *Euthycera guanchica* was also at rest on this plant. A white flowered plant produced a smaller eumenid (*Leptocheilus* sp.) and the conopid fly *Physocephala biguttata* v. Röd., which I had collected at Guimar in Tenerife. This fly is superficially like our *P. rufipes* (F.) but its legs are darker and the waisted part of the abdomen bears a black band; it also lacks the clear spot near the tip of the brown wing band. The tachinid *Allophora (Hyalomya) pusilla* (Mg.), not previously recorded from the Canaries, was swept from coarse vegetation. Under a hedge in the cultivated area, the striking xylomyiid *Solva nigritibialis* (Macq.) was swept; I had collected a pair near a rotten log at Las Mercedes in Tenerife. Enderlein (1929) recorded rearing *S. cabrerae* (Beck.) (probably a synonym of *nigritibialis*) from a rot hole in the large succulent shrub *Euphorbia canariensis* L. but Frey (1973) mentioned *nigritibialis* flying around a tree stump. Both habitats may be utilised by this species and Machado's (1977) suggestion that it is more typical of the lower xerophytic zone but may invade the laurisilva, may not be entirely correct.

The final excursion on 2nd June was the planned return visit to Cubo de la Galga, the most accessible laurel forest, the approach this time being made by the forest road from near the La Galga tunnel. It was a hot sunny afternoon and many butterflies were flying along the open track and in the clear-

ings. *P. pandora*, *V. i. vulcania*, *L. phlaeas*, *P. rapae*, *M. j. hispulla*, *P. xiphoides*, *C. croceus* and *P. cheiranthi* were flying, the last only in small forest glades where several examples of *Gonepteryx palmae* were also conspicuous.

Much of the ground in the close canopy forest was covered with large boulders with clumps of *Crambe* and *Geranium canariense* Reut. growing between. Sweeping here produced few species although *Aulacigaster* was again abundant; *Drosophila pallida*, *Hylemya latevittata*, *Fannia pubescens* and *F. monilis* Hal., *Hebecnema vespertina* (Fall.), *H. rufitibia*, *Suillia oceana*, *Coenosia bivittata* Stein and *Oedosphenella* were also collected. *Myathropa florea* var. *nigrofemorata* was sunning itself in glades; there is another variety in the Canary Islands, *varifemorata* Santos, with paler legs, which I did not find. The Canarian race of *M. florea* differs from the typical form in the pilosity being denser and more golden; also the pile on the frons is golden while in European examples the frons is black with black hairs. *Melanostoma incompletum* was common. A sunlit puddle on the track was attracting the muscids *Lispe tentaculata* (Deg.), *L. thoracica* Santos and *Limnophora obsignata* Rond., the dolichopodid *Argyra canariensis* Beck., *Eristalis tenax* and the wasp *Trypoxyylon attenuatum* Sm. A muddy patch elsewhere produced *Scatella* and *Parydra* (Ephydriidae) and *Gonomyia copulata* Beck. (Tipulidae). A good catch of mycetophilids was made from overhangs on damp rock faces, which also sheltered countless *Pesychoda*.

Shortly before my departure, I located Señor Santos Pinto, the grandson of Santos Abreu, who lives at Santa Cruz; I found that much of his grandfather's collection is now at the museum in Tenerife but he was able to show me a good range of local Diptera including many specimens collected by his father (Santos Rodriguez). These included the asilid *Pro machus palmensis* Frey and a good series of the platypezid *Callomyia dives*, also a wider range of moisture loving flies such as tipulids and dolichopodids than I had been able to find.

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SOME UNUSUAL DATES IN THE SUMMER AND AUTUMN OF 1978.—The latter half of 1978 was indeed anomalous in its production of species at most unusual and unexpected dates, some of which as enumerated below are distinctly precocious, while others are very much on the late side and probably designate of prolonged emergence or second broods. The dates refer to records in my m.v. trap run continuously in the garden here.

August 17th, *Deuteronomos fuscantaria* Steph.; August 18th, *Hyloicus pinastri* L.; August 20th, *Parascotia fuliginaria* L.; September 9th, *Cosymbia albipunctata* Hufn.; September 10th, *Euphyia bilineata* L.; September 16th, *Cosmia trapezina* L.; September 19th, *Cosymbia punctaria* L.; September 21st, *Cleora rhomboidaria* D. & S.; September 23rd, *Amathes xanthographa* D. & S.; September 21st, *Mamestra brassicae* L., *Hypena proboscidalis* L., *Sterrha aversata* L.; October 11th, *Xanthorhoe fluctuata* L.; October 28th, *Cirrhia icteritia* Hufn. —C. G. M. DE WORMS, Three Oaks, Horsell, Woking.